

Abstract

University: Charles University in Prague, Faculty of Pharmacy in Hradec Králové

Department: Pharmaceutical technology

Title of thesis: Thermal properties of nanofiber membranes II.

Author: Leona Kratochvílová

Nanofiber membranes compared with other materials have a number of exceptional properties. This is ideal for use in a number of important applications, including the following example, protective fabrics, various kinds of filters for ophthalmology, neurology, usable materials to cover wounds or applying materials as drug carriers.

Release of drugs from the nanofiber membranes can take place other than the conventional dosage forms. This system can be used for example for controlled drug release.

In this work the thermal behavior is presented nanofiber membranes of polylactic acid (PLA), polycaprolactone (PCL), polyurethane (PUR), gelatin. As the active substances have been used naproxen sodium, naproxen and finally nanofiber membranes of polylactic acid and polyurethane with naproxen.